

is not done we shall not be surprised to have an early announcement similar to that in the December number of the *American Naturalist*, in which appears the naive item — we are sure our readers will appreciate its fine humor — “Prof. C. H. Gilbert is professor of *Vertebrate Biology* in Leland Stanford University.”

IN THIS CONNECTION we are much pleased to note the establishment of a new chair of histology and cryptogamic botany at Cornell University. This is a move in the right direction.

CURRENT LITERATURE.

Kuntze's "Revisio Generum Plantarum." ¹

This is one of the most ambitious botanical works of recent years, and has involved a prodigious amount of labor. However botanists may differ as to its conclusions, they must always be grateful for the vast amount of facts thus brought together. It is becoming more and more apparent that the nomenclaturists are not to agree with each other, at least until another congress has definitely established a datum line. In the meantime the systematist who is not a nomenclaturist feels inclined to reserve his opinion until the dust has settled somewhat and things can be seen more clearly. When all the ancient records have been searched, and books like those before us have become numerously multiplied, and confusion worse confounded reigns, some one will begin to bring order out of chaos, stability out of upheavals. There is no desire here to criticize the efforts of nomenclaturists, of whom Dr. Kuntze seems to be the bright consummate flower, but to emphasize the fact that we are still in the period of “stirring up,” not of “settling.” Devoid of all principles, sound or otherwise, we hold ourselves in readiness to accept and use any name which gives promise of a reasonable tenure of life.

The GAZETTE has often given, and still maintains the opinion that the necessary changes in nomenclature should never be attempted in this wholesale fashion, but that they should be made by monographers, who have an abundance of material before them and know whereof they speak.

The volumes before us are such as will demand consultation by all those who deal in phytography. The wealth of reference is marvel-

¹ KUNTZE, OTTO.—*Revisio Generum Plantarum vascularium omnium atque cellularium multarum secundum leges nomenclaturæ internationales cum enumeratione plantarum exoticarum in itinere mundi collectarum.* 2 vols. 8 vo. pp. clxvix, 1011. Leipzig, London, Milan, Paris, New York (Gust. E. Stechert, 828 Broadway), 1891.

lous, while dates of genera and important works will furnish a mine of information to all systematists who do not have access to the extensive literature to be found at London and Berlin. The author seems to have caused most confusion by taking up the generic names of the first edition of Linnæus, *Systema*, instead of the first edition of his "Genera Plantarum." To illustrate, it may be imagined what confusion will arise in changing *Nasturtium* to *Cardamine*, *Arabis* to *Erysimum*, *Lepidium* to *Nasturtium*, and *Sisymbrium* to *Hesperis*. Upon the flimsiest pretext for example, *Tragacantha* replaces *Astragalus*, and its nearly 1500 species are renamed. To mention all the suggested changes, or even the startling ones, that have to do with North American plants would be impossible in the space at our command, but in this connection we are glad to call attention to the excellent service rendered by our friend, Dr. Britton, in printing in the February *Bulletin* the principal changes suggested for the generic names of North American plants, a service rendered still more valuable by his own annotations.

The plant world.¹

Under this title Mr. Massee has published what appear to be lectures originally prepared for use under the auspices of the London Society for the extension of university teaching, to which society Mr. Massee is a lecturer. These lectures deal with plant architecture; the chemistry and physics of plant life; protective arrangements; reproduction in plants; relationship amongst plants; fossil plants; and the geographical distribution of plants.

Mr. Massee is a botanist of no mean repute, and one expects more of him than of an unknown tyro. The ground covered by this little book embraces some of the most interesting portions of the science. We wish that we could say that it is a readable book. It has very much in it to which no exceptions could be taken; much that is interesting and well put. But it is exceedingly uneven. In the main it is accurate, though not infrequently the writer's meaning is obscure because of his faulty English. This is the more remarkable by reason of the general clearness of Mr. Massee's scientific papers. On the side of fact the histological part of the chapter on plant architecture is perhaps the worst, and this also is marked by the poorest illustrations.

As a whole the style is very bad. The sentences are long and involved. Occasionally they extend to enormous lengths. We note one

¹ MASSEE, GEORGE:—The plant world, its past, present and future; an introduction to the study of botany. 12 mo., pp. x. 212, figs. 56. London: Whitaker & Co. (New York: Macillman & Co.) 1891. 3s. 6d.

on pages 82 and 83 which is over a page long and contains 339 words, equalling about three-fourths of a page of the GAZETTE. Those covering half a page are frequent. These long sentences seem to be constructed on the same principle as the mnemonic word-chains; the thing with which the writer began reminded him of something, that of something else, and so on until by the time the period is reached one finds that he is talking of something rather remote from that with which he began. Here is a sentence which sadly needs mending: "It must be understood that potassium is not the only factor necessary for the formation of starch; but if this substance is absent, even if all other conditions are favorable, as in the case of iron and chlorophyll so also with starch which contains no potassium, the latter being necessary for promoting the chemical changes resulting in the formation of starch." p. 56.

We fear also that Mr. Masee's generalizations will be found much too sweeping. The voice is the voice of Masee, but the reasoning is the reasoning of Grant Allen. It is taking, but it is not sound.

Making a charitable guess we should say that Mr. Masee had been persuaded to allow his lectures to be printed without having or taking sufficient time to revise them properly. If these popular books were to be read only by specialists there would be little mischief in erroneous or faulty statements. But no book demands so much of an author as one that is prepared for readers who are not able to separate the wheat from the chaff. This book needs a little winnowing, and the grains of truth should be thoroughly brushed before they go through the mill of the "general reader."

Minor Notices.

THE VERY INTERESTING address of Dr. George L. Goodale as retiring president of the A. A. A. S. on the useful plants of the future, and some of the possibilities of economic botany, has been distributed in reprints from the *Proceedings* of the association.

THE MALTREATMENT of our shade trees and the diseases which are likely to follow the mechanical injuries which are inflicted upon them by thoughtless drivers, ignorant trimmers and ruthless linemen, formed the subject of an address before the Massachusetts Horticultural Society by Dr. W. G. Farlow, which has recently been reprinted from the *Proceedings* of the society. The society was urged to make an effort to secure legislation which should make compulsory the placing of guards around trees and the entrusting of the care of trees in public grounds only to persons specially trained for the purpose. The GAZETTE would bid such efforts God-speed.

IN CONNECTION with the paper of the series on flowers and insects published in this number from the pen of Mr. Charles Robertson, it may be well to call the attention of all our readers who are interested in these topics, to the paper of the same series printed in the *Transactions* of the St. Louis Academy of Science, vol. v, p. 569. The orders therein treated are the Asclepiadaceæ to Scrophulariaceæ.

IN A RECENT bulletin, notable as being no. 1 of the division of vegetable pathology, Dr. Erwin F. Smith adduces additional evidence of the communicability of peach yellows and peach rosette. The latter disease has been considered a form of the yellows, but Dr. Smith has recently described it as a different disease. It is spreading in the archean region of Georgia, and is more virulent than the yellows. Extermination of diseased trees is the only measure that can be suggested at present.

MR. JOHN ROBINSON published in the *Salem Gazette*, during the summer of 1891, a series of articles upon the trees of Salem and vicinity. These papers have since been revised, and now appear in pamphlet form issued by the Essex Institute. They were written for popular entertainment and instruction, but in Mr. Robinson's hands they have been made full of interest to botanists as well.

DR. GEORGE VASEY'S "Grasses of the Southwest," Part II, completing the first volume, has been distributed, and fully sustains the excellent character of Part I. Fifty species are illustrated by most excellent full page plates, and facing each plate is the descriptive text. We could have wished that with every description a full statement of the range of the species could have been given. The trimming of the leaves also has made binding difficult, for any further reduction will cut into the titles of plates or the figures themselves.

"THE GENUS POLYGALA IN North America," by Wm. E. Wheelock, is the title of the fourth and last number of Volume II of the "Memoirs of the Torrey Botanical Club." Mr. Wheelock has studied the specimens found in the largest American herbaria and Dr. Britton has examined most of the types preserved in Europe. The species number 38, and of these very full descriptions, synonymy, and range are given. A new species from Texas (*P. Tweedyi* Britton,) is described, and some new varieties proposed. *P. fastigiata* Nutt. (1818) is *P. Mariana* Mill. (1768); and *P. viridescens* L. replaces *P. sanguinea* L. of same date. The error of date under *P. Rugelii* had better be corrected. It should read Shuttleworth, Chapm. BOTANICAL GAZETTE, iii. 4 (Jan. 1878).

PROFESSOR GREENE'S *Flora Franciscana*, Part II, continues that important work through 24 additional orders. The succession of families

is interesting to those only familiar with the ordinary sequence. The intercalation of Apetalæ among Polypetalæ has long been a much desired change, and it is a good thing to have it put in this concrete way and applied to our North American plants. The changes in generic and specific nomenclature are mostly such as Professor Greene has already indicated in previous papers.

OPEN LETTERS.

The new herbarium pest.

In reference to the article in the December number, 1891, by Prof. C. V. Riley on the "New Herbarium Pest," let me add my experience. Today in looking over duplicates four of the geometrid larvæ were found on *Aphyllon Ludovicianum* collected in this county in June, 1890. A few drops of a pretty strong solution of corrosive sublimate and arsenic in diluted alcohol were dropped on each. During an examination of the plants for more larvæ or eggs, in about twenty minutes, the liquid had evaporated, and the paper being again dry, I observed to my dismay the little surveyors stretch and move again, slowly at first, but in about five minutes as actively as before their bath. They are now bottled for observations. This extraordinary tenacity of life increases the formidability of this pest.—DR. H. E. HASSE, *Santa Monica, Calif.*

NOTES AND NEWS.

THE STATE OF KANSAS is spending \$3500 in spreading the entomophthoral disease of chinch bugs under the direction of Professor F. H. Snow.

PROFESSOR W. C. WILLIAMSON, until recently at Owen's College, Manchester, has changed his residence to 43 Elms Road, Clapham Common, London.

DR. SERENO WATSON died March 9th, at his home in Cambridge, Mass., after a prolonged illness resulting from an attack of "la grippe." No tidings since the death of Dr. Gray will cause botanists profounder sorrow than this.

DR. THOMAS TAYLOR, the United States microscopist, is said to be preparing models of fungi for the Columbian Exposition, to include all the edible varieties of the United States.

THE DECEMBER NUMBER of the *Microscopical Bulletin* contains a very fine photogravure of *Bacillus tuberculosis* made from a photograph taken with Queen's 1-15 homogeneous immersion lens.

THE UNIVERSITY EXTENSION work of the State University of Iowa embraces twelve lectures on "world-making," four of which are devoted to plants. The botanical lectures are given by Professor T. H. McBride.